

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P584035

Luminaire Tested: **HC820D010-HM80520927-81NDH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC820D010-HM80520927-81NDH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1600.4 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

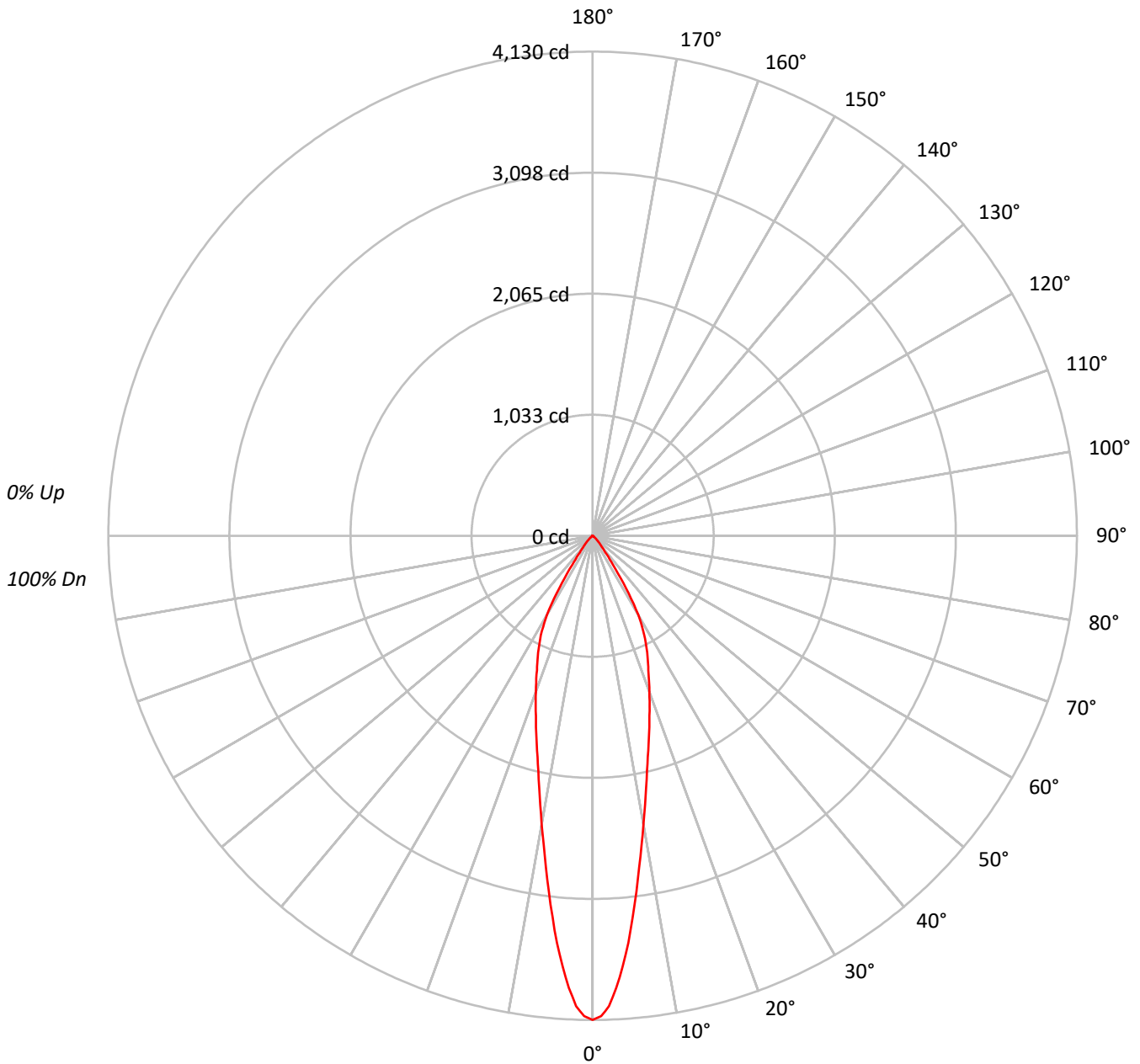
Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P584035

CATALOG NUMBER: HC820D010-HM80520927-81NDH

Luminous Intensity Polar Plot





TEST NUMBER: P584035

CATALOG NUMBER: HC820D010-HM80520927-81NDH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84	84	84	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80	80	80	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75	75	75	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72	72	72	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65	65	65	65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62	62	62	62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59	59	59

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	127348
5°	107891
10°	78277
15°	58785
20°	46381
25°	37413
30°	27723
35°	11229
40°	4738
45°	2542
50°	1142
55°	581
60°	364
65°	255
70°	216
75°	143
80°	213
85°	425



TEST NUMBER: P584035

CATALOG NUMBER: HC820D010-HM80520927-81NDH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.3	18.7
10°-20°	517.2	32.3
20°-30°	500.0	31.2
30°-40°	219.6	13.7
40°-50°	47.5	3.0
50°-60°	10.7	0.7
60°-70°	3.6	0.2
70°-80°	1.4	0.1
80°-90°	1.1	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1316.5	82.3
0°-40°	1536.0	96.0
0°-60°	1594.2	99.6
0°-90°	1600.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1600.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4130	
5°	3486	299
15°	1841	517
25°	1100	500
35°	298	220
45°	58	47
55°	11	11
65°	4	4
75°	1	1
85°	1	1
90°	0	



TEST NUMBER: P584035

CATALOG NUMBER: HC820D010-HM80520927-81NDH

CANDELA DISTRIBUTION (FULL):

0°	
0°	4129.8
1°	4098.8
2°	4014.4
3°	3862.3
4°	3680.4
5°	3485.5
6°	3272.6
7°	3058.7
8°	2857.7
9°	2671.1
10°	2499.9
11°	2338.2
12°	2193.2
13°	2061.3
14°	1944.9
15°	1841.4
17.5°	1609.5
20°	1413.4
22.5°	1241.1
25°	1099.6
27.5°	955.8
30°	778.6
32.5°	528.9
35°	298.3
37.5°	175.9
40°	117.7
42.5°	83.2
45°	58.3
47.5°	38.1
50°	23.8
52.5°	14.3
55°	10.8
57.5°	8.3
60°	5.9
62.5°	4.7
65°	3.5
67.5°	2.4
70°	2.4
72.5°	1.2
75°	1.2
77.5°	1.2
80°	1.2
82.5°	1.2



TEST NUMBER: P584035

CATALOG NUMBER: HC820D010-HM80520927-81NDH

CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







85°	1.2
87.5°	1.2



(END OF REPORT)